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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/520,197	02/25/2000	Francois Maurice	RCA 88.441A	5680

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, CHANH DUY

ART UNIT	PAPER NUMBER
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2675

21

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/520,197

Applicant(s)

MAURICE, FRANCOIS

Examiner

Chanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 16-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on April 19, 2004 has been entered and considered by examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dieudonne et al (FR 2,542,896) in view of Kawamori (U.S. Patent No. 5,598,178).

As to claim 14, Dieudonne discloses a display device having an active matrix including a plurality of scanners (DL) for selection line (LA), a plurality of scanners for columns (DC), and supplementary conductive column (e.g., CC2)) crossing over the selection lines (LA). Dieudonne does not mention a capacitively coupled to each of them in such way that each corresponding coupling capacitance having a value close to the sum of the coupling capacitances formed between a given selection line and the columns with given selection line crosses. Kawamori teaches a supplementary conductive column (e.g., D1-Dn) crossing over the selection lines (Y1-Ym), and capacitance (dummy capacity elements 5) coupled to each of them. Kawamori teaches

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that "a sum of the electrostatic capacities of the dummy display element in each line being virtually equal to a sum of the electrostatic capacities of all the display elements in the corresponding scanning line in the liquid crystal display element" (see column 12, lines 30-34). This reads on claimed "each corresponding coupling capacitance having a value close to the sum of the coupling capacitances formed between a given selection line and the columns with given selection line crosses" as recited in the claim.

Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used coupling capacitance (or dummy element) as taught by Kawamori to the supplementary conductive column of Dieudonne so as to crosstalk phenomenon can be reduced or eliminated (see column 4, lines 53-56 of Kawamori).

As to claim 15, Dieudonne clearly teaches comparator circuit (OP1) coupled to the supplementary conductive column (e.g., CC2). Thus, combining Dieudonne and Kawamori would meet all the limitation recited in claim 15.

Allowable Subject Matter

4. Claims 16-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed April 19, 2004 have been fully considered but they are not persuasive.

On page 19, applicant argues that Kawamori does not teach or suggest at column 12, lines 30-34, that each corresponding coupling capacitance has a value

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close to the sum of others capacitances, but rather that "a sum of the electrostatic capacities of the dummy display element in each line being virtually equal to a sum of the electrostatic capacities of all the display elements in the corresponding scanning line in the liquid crystal display element". However, examiner would like to present his point of view as follows: First, Kawamori teaches that "a sum of the electrostatic capacities of the dummy display element in each line being virtually equal to a sum of the electrostatic capacities of all the display elements in the corresponding scanning line in the liquid crystal display element" (see column 12, lines 30-34). Kawamori further teaches "the dummy capacities, each having a per element capacity that is greater than the capacity of one dot of each display element" (see column 8, lines 32-45). Thus, if the display panel has only two display elements, then there is only one dummy display element in the device of Kawamori because (1) each (dummy element) having a per element capacity that is greater than the capacity of one dot of each display element, and (2) a sum of the electrostatic capacities of the dummy display element in each line being virtually equal to a sum of the electrostatic capacities of all the display elements in the corresponding scanning line. For the reason above, if more than one dummy elements for two display elements in display panel, then the sum of the electrostatic capacities of the dummy display element in each line being is not equal to a sum of the electrostatic capacities of all the display elements in the corresponding scanning line. This is not what Kawamori describes in column 12, lines 30-34 (i.e. equal capacities). Secondly, it is not necessary that the number of dummy elements is the same as the number of display elements. For example, Figure 4 of Kawamori shows number of

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dummy elements in array (10) are less than the number of the display elements. Thus, it is clear that one dummy element can be used for two display elements.

On page 20, applicant argues that the device of Kawamori duplicates the drivers with a dummy driver 6. It is not true in Figure 4 of Kawamori. Figure 4 of Kawamori the drivers does not duplicate with a dummy driver. In fact, the dummy elements in Figure 4 of Kawamori is fewer than the display elements of the display panel. Applicant argues that Kawamori's device is a complex structure of calculation means (counter) which is teach away from the simple structure of the claimed. However, the simple calculation structure of the invention is not recited in claim 14. The simple structure of the invention has been indicated allowable in claims 16-20. Thus, applicant may rewrite these claims in independent form including all of the limitations of the base claim and any intervening claims so that the application can be forward to allowance.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Steven Saras can be reached at 305-9720.

Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

CM

C. Nguyen
July 10, 2004

Chanh Nguyen
CHANH NGUYEN
PRIMARY EXAMINER